



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/579,983

05/22/2006

Estibalitz Erauzkin Bilbao

G80-035 US

3727

21706 7590 05/08/2009

NOTARO & MICHALOS P.C.  
100 DUTCH HILL ROAD  
SUITE 110  
ORANGEBURG, NY 10962-2100

EXAMINER

YANG, JIE

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

05/08/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/579,983	<b>Applicant(s)</b> ERAUZKIN BILBAO ET AL.	
	<b>Examiner</b> JIE YANG	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 12-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-23 are pending, claims 12-23 have been withdrawn as non-elected claims. Claims 1-11 remain for examination. No amendments to the claims have been made.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abkowitz et al (US 5,897,830, thereafter US'830) in view of Brupbacher et al (US 4,772,452, thereafter US'452).

US'830 in view of US'452 is applied to the claims 1, 3-10 for the same reason as stated in the previous rejection dated 10/27/2008.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US'830 in view of US'452, and further in view of Brupbacher et al (US 4,836,982, thereafter US'982).

US'830 in view of US'452 and further in view of US'982 is applied to the claim 2 for the same reason as stated in the previous rejection dated 10/27/2008.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over US'830 in view of US'452, and further in view of Ray et al (US 6,755,239 B2, thereafter US'239).

US'830 in view of US'452 and further in view of US'239 is applied to the claim 11 for the same reason as stated in the previous rejection dated 10/27/2008.

### ***Response to Arguments***

Applicant's arguments filed on 2/25/2009 with respect to claims 1-11 have been fully considered but they are not persuasive.

Applicant's arguments are summarized as follows:

1, Regarding US'830, this reference comprises the use of a single consumable billet of a consolidated powder having a titanium metal matrix and reinforced particles dispersed therein. The percentage of reinforcement material is predetermined by the percentage of the initial consumable billet, which contrast the instant invention. The method of claim 1 of the instant application comprises two starting materials. The percentage of reinforcement material is not predetermined and, thus, may be adjusted at will.

2, US'454 relates to the preparation of metal second-phase composite material (i.e., the subject matter of the US'452 patent belongs to a different technical field. Therefore, a person having ordinary skill in the art to which the present invention pertains would not be prompted to apply the teachings of the US'452 patent to the teaching of the US'830 patent to arrive at the invention claimed in claim 1.

3, It is noted that the office action does not explain why and how a skilled artisan would combine the teaching of the US'830 patent and the US'452 patent to arrive at the invention claimed in claim 1.

Responses are as follows:

Regarding the argument 1, as pointed out in the previous office action marked 10/27/2008, US'830 teaches melting the P/M (powder metallurgical) titanium alloy and casting (Col.3, lines 39-59, claims 25-26, and Col.1, lines 46-64 of US'830). US'830 teaches selecting TiC, TiB, and/or TiB<sub>2</sub> as the reinforcing particles in titanium and titanium alloy (Col.3, lines 3-16 of US'830). To adjust the composition of the powder to obtain the desired alloy would have been obvious to one skilled in the art. This point is further evidenced by US'452. US'452 teaches a process for forming metal-second phase composites utilizing compound starting materials (Title of US'452). US'452 teaches that the matrix metal needs not to be formed from powdered metal, but may be formed from ingot, scrap, etc., thus resulting in a significant saving in material preparation costs (Col.13, lines 3-8 of US'452).

Regarding the arguments 2 and 3, as pointed out in the previous office action marked 10/27/2008, US'452 teaches that the matrix metal needs not to be formed from powdered metal, but may be formed from ingot, scrap, etc., thus resulting in a significant saving in material preparation costs (Col.13, lines 3-8 of US'452), which is a good motivation to combine the teaching of the US'830 patent and the US'452 patent to obtain the desired composition alloy as recited in the instant claims.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-270-1884. The examiner can normally be reached on M-F, 7:30-5:00 EST.

Art Unit: 1793

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY

/Roy King/  
Supervisory Patent Examiner, Art Unit 1793